at1121exam_practice: Radicals and Squares (v613)

Question 1

Simplify the radical expressions.

$$\sqrt{50} \qquad\qquad \sqrt{44} \qquad\qquad \sqrt{63}$$

Question 2

Find all solutions to the equation below:

$$2(x-4)^2 + 8 \;=\; 80$$

Question 3

By completing the square, find both solutions to the given equation. *You must show work for full credit!*

$$x^2 + 10x \;=\; 56$$

Question 4

A quadratic polynomial function is shown below in standard form.

$$y \;=\; 2x^2 - 16x + 39$$

Express the function in **vertex form** and identify the **location** of the vertex.